

Professional and Managerial Branch
Engineering Group
Registered Engineer Series

ELECTRICAL ENGINEER III

09/89

CHARACTERISTICS OF THE CLASS:

Under direction, supervises engineering and support personnel and performs a variety of electrical engineering duties; performs related duties as required.

EXAMPLES OF DUTIES:

Designs and supervises personnel engaged in the design of electrical equipment and in the preparation of specifications to obtain the most efficient utilization of energy; plans the design and development of solid state digital control and monitoring equipment; prepares electronic designs, schematics, assembly diagrams, wire lists and wiring diagrams; supervises the building, testing, and de-bugging of prototype units; prepares costs estimates of projects; selects and procures components used to construct electrical equipment; supervises construction, installation and start-up of electrical components and equipment; recommends procedures for efficient operation of equipment.

Supervises the inspection of contract projects; assigns inspection and testing of workmanship and materials used in construction; interprets plans and specifications of work being done under contract; reviews plans for proposed electrical components and equipment prepared by private professional engineers.

Assembles and prepares specifications; analyzes and solves problems and supervises the implementation of solutions; oversees the preparation of technical reports; appraises shortages, excesses, quality and costs of existing facilities; represents the City at public hearings and meetings; acts as liaison with local utilities for the installation and rate-setting of gas and electrical service.

Supervises, trains and evaluates assigned personnel; enforces established rules and regulations, standards of conduct and work attendance; complies with and enforces safe working practices and procedures; maintains records and prepares reports.

MINIMUM QUALIFICATIONS:

Training and Experience: Graduation from an accredited college or university with a Bachelor's Degree in Electrical Engineering and four years of professional electrical engineering experience, including two years in a supervisory capacity; or an equivalent combination of training and experience.

Knowledge, Abilities and Skills: Considerable knowledge of the principles and practices of electrical engineering; considerable knowledge of the methods, materials, tools and equipment used in electrical construction; considerable knowledge of cost determination techniques as they pertain to electrical assemblies; considerable knowledge of federal, state and local laws, codes and ordinances as they pertain to electrical engineering; good knowledge of supervisory methods, standards of conduct and work attendance; good knowledge of safe working practices and procedures; good knowledge of the use of computer-aided drafting and design (CADD) systems.

Ability to supervise, train and evaluate assigned personnel; ability to detect, analyze and find solutions for defects in equipment and components; ability to prepare and implement procedural improvements; ability to prepare designs, plans and specifications; ability to determine project costs; ability to establish and maintain effective working relationships with fellow employees, officials and the general public; ability to express oneself clearly and concisely, both orally and in writing; ability to maintain records and prepare reports.

Physical Requirements: Mobility within an office, field and construction site environment; operate a motor vehicle through City traffic.

Special Requirements: Subject to on-call during non-working hours and mandatory overtime during periods of Public Works Emergency Operations.

Licenses and Certificates: Texas Class "C" Drivers License or equivalent license issued by another state; registration as a Professional Engineer in the State of Texas.

Director of Personnel

Department Head